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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/735,196	12/11/2003	Marcus Darren Gruetzmacher	33278.3.02	2605
22511 OSHA LIANG	7590 02/08/2007		EXAMINER	
1221 MCKINNEY STREET SUITE 2800 HOUSTON, TX 77010			A, PHI DIEU TRAN	
			ART UNIT	PAPER NUMBER
110031011, 12 77010			3637	
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SHORTENED STATUTO	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		<u> </u>				
•		Application No.	Applicant(s)			
Office Action Summary		10/735,196	GRUETZMACHER, MARCUS DARREN			
		Examiner	Art Unit			
•		Phi D. A	3637			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAY IN THE MAILING	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠	Responsive to communication(s) filed on 14 No.	ovember 2006.	•			
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Dispositi	ion of Claims					
4)⊠	Claim(s) <u>1-40</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	5) Claim(s) is/are allowed.					
-	Claim(s) <u>1,3-11,13,30-35,40</u> is/are rejected.					
· · · · · · · · · · · · · · · · · · ·	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and/o	r election requirement.				
Applicati	ion Papers	·	•			
9)[The specification is objected to by the Examine	er.	ν.			
10)	The drawing(s) filed on is/are: a) acc	epted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	e 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct	·				
11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.			
Priority (under 35 U.S.C. § 119					
•	Acknowledgment is made of a claim for foreign All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)-(d) or (f).			
	1. Certified copies of the priority document	s have been received.				
	2. Certified copies of the priority document	s have been received in Applicat	ion No			
	3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Stage			
	application from the International Bureau					
* (See the attached detailed Office action for a list	of the certified copies not receive	∍d.			
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Attachmen	• •					
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D				
3) 🔲 Infor	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5) Notice of Informal F 6) Other:				

Office Action Summary

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1, 3-9, 30-34,40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliphant et al (5761875) in view of Hay (1947413).

Oliphant et al discloses a method of reinforcing a monopole tower comprising forming a reinforcing column including applying a fluid (concrete) reinforcing material to embed a vertical length of the tower, holding the fluid reinforcing material in place along the vertical length of the tower until it solidifies to form the column having the length of tower embedded therein, the fluid material comprising wet concrete cement (col 2 line 43), embedding a plurality of spaced apart tension cables (col 2 lines 45-46) into and extended vertically through the column.

Oliphant does not show the step of using a releasable mold, the step of releasing the mold from the reinforcement column.

Hay shows the step of using a releasable mold, the step of releasing the mold from the reinforcement column.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Oliphant et al's structure to show step of using a releasable mold, the step of releasing the mold from the reinforcement column as taught by Hay because it allows for the easy molding of a column reinforced by concrete.

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2. Claims 1, 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliphant et al (5761875) in view of Hay (1947413) and Shiraishi et al

Oliphant et al as modified shows all the claimed limitations except for the tower having a metal tubular structure.

Shiraishi et al shows a twoer having a metal tubular strucuture.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify modified Oliphant et al's structure to show the tower having a metal tubular structure as taught by Shiraishi et al because it reinforces the column structure.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oliphant et al and Hay (1947413) in view of Jackson (4104868).

Oliphant et al as modified shows all the claimed method steps except for the step of molding a plurality of spaced apart tension cables into and extending vertically through the reinforcement column.

Jackson discloses the step of molding a plurality of spaced apart tension cables into and extending vertically through the reinforcement column.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Oliphant's modified method step to show the step of molding a plurality of spaced apart tension cables into and extending vertically through the reinforcement column because having spaced apart tensioned cables would reinforce the concrete structure as taught by Jackson.

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4. Claims 11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliphant in view of Hay and Jacking as applied to claim 10 above and further in view of Norton et al (4452028).

Oliphant shows all the claimed method steps except for the step of providing tensioners for tensioning the tension cables from the top of the column.

Norton et al discloses tensioners for tensioning the cables from the top of a structure.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Oliphant's method step to show the step of providing tensioners for tensioning the tension cables from the top of the column as taught by Norton et al because having tensioners would allow for the tensioning of the cables when needed, and having tensioned cables on a concrete column would reinforce the concrete better than non-tensioned cables.

Response to Arguments

2. Applicant's arguments with respect to claims 1,3-11,13,30-35,40 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different molding device and methods thereof.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phi Dieu Tran A

2/5/07